

Abstract of the Disclosure

17 The present invention relates to an optical filter comprising an integrated wavelength
18 dispersive element having an input for providing temperature compensation, particularly
5 for providing passive temperature compensation in an arrayed waveguide grating. The
19 present invention has found that by providing an arrayed waveguide grating having a
20 thermally responsive pivotal input structure for changing an angle of a collimated input
21 signal launched into a focusing lens, the input point can be selected in response to
22 changing temperature in order to compensate for thermal drift of the center wavelength.
10 Further, the present invention has found that by providing a reflective lens assembly for
11 focusing an input signal at a selected input point of the input planar waveguide,
12 alignment and tuning of an input and assembly can be improved and simplified. As an
13 additional advantage, variable coupling parameters can be incorporated into a reflective
14 coupling including input position, waveguide taper and planar waveguide length
15 increment to provide relatively simple tuning in an integrated device.